

CLAIMS

1. A method for optimizing cell available (CLAV) status polling of a plurality of physical interface addresses, the method comprising the steps of:
 - polling a plurality of PHY addresses to determine CLAV status;
 - 5 receiving the CLAV status for each one of the plurality of PHY addresses;
 - determining whether the CLAV status could change for each PHY address; and
 - re-polling each PHY address with a CLAV status that could change.
2. The method of claim 1, wherein the CLAV status that could change comprises an inactive CLAV status.
- 10 3. The method of claim 1, wherein the CLAV status that could change comprises a completed cell transfer.
4. The method of claim 2, wherein the step of re-polling further comprises the step of:
 - re-polling addresses with an inactive CLAV status.
- 15 5. The method of claim 3, wherein the step of re-polling further comprises the step of:
 - re-polling addresses having completed a cell transfer.
6. The method of claim 1, wherein re-polling of PHY addresses having an active CLAV status are avoided.
- 20 7. The method of claim 1, wherein the CLAV status comprises ability to receive a cell.
8. The method of claim 7, wherein a PHY address is re-pollled within at least four bytes of a previous cell transfer.
9. The method of claim 1, wherein the CLAV status comprises the ability to
25 transmit a cell.
10. The method of claim 1, wherein each PHY address with an inactive CLAV status is re-pollled until the PHY address indicates an active CLAV status.
11. The method of claim 1, wherein the physical interface is a UTOPIA.
12. A system for optimizing cell available (CLAV) status polling of a plurality
30 of physical interface addresses, the system comprising:

a polling module for polling a plurality of PHY addresses to determine CLAV status;

a status module for receiving the CLAV status for each one of the plurality of PHY addresses;

5 a determining module for determining whether the CLAV status could change for each PHY address; and

a re-polling module for re-polling each PHY address with a CLAV status that could change.

10 13. The system of claim 12, wherein the CLAV status that could change comprises an inactive CLAV status.

14. The system of claim 12, wherein the CLAV status that could change comprises a completed cell transfer.

15 15. The system of claim 13, wherein the re-polling module further comprises re-polling addresses with an inactive CLAV status.

16. The system of claim 14, wherein the re-polling module further comprises re-polling addresses having completed a cell transfer.

17. The system of claim 12, wherein re-polling of PHY addresses having an active CLAV status are avoided.

20 18. The system of claim 12, wherein the CLAV status comprises ability to receive a cell.

19. The system of claim 18, wherein a PHY address is re-pollled within at least four bytes of a previous cell transfer.

20. The system of claim 12, wherein the CLAV status comprises the ability to transmit a cell.

25 21. The system of claim 12, wherein each PHY address with an inactive CLAV status is re-pollled until the PHY address indicates an active CLAV status.

22. The system of claim 12, wherein the physical interface is a UTOPIA.

23. A computer readable medium, the computer readable medium comprising a set of instructions for optimizing cell available (CLAV) status polling of a

plurality of physical interface addresses and being adapted to manipulate a processor to:

poll a plurality of PHY addresses to determine CLAV status; and

receive the CLAV status for each one of the plurality of PHY addresses;

5 determining whether the CLAV status could change for each PHY address; and
poll each PHY address with a CLAV status that could change.

24. The computer readable medium as in claim 23, wherein the CLAV status that could change comprises an inactive CLAV status.

10 25. The computer readable medium as in claim 23, wherein the CLAV status that could change comprises a completed cell transfer.

26. The computer readable medium as in claim 24, wherein the instructions are further adapted to re-poll addresses with an inactive CLAV status.

27. The computer readable medium as in claim 25, wherein the instructions are further adapted to poll addresses having completed a cell transfer.

15 28. The computer readable medium as in claim 23, wherein the instructions are further adapted to avoid re-polling PHY addresses having an active CLAV status.

29. The computer readable medium as in claim 23, wherein the CLAV status comprises ability to receive a cell.

20 30. The computer readable medium as in claim 23, wherein the instructions are further adapted to re-poll a PHY address within at least four bytes of a previous cell transfer.

31. The computer readable medium as in claim 23, wherein the CLAV status comprises the ability to transmit a cell.

25 32. The computer readable medium as in claim 23, wherein the instructions are further adapted to re-poll each PHY address with an inactive CLAV status until the PHY address indicates an active CLAV status.

33. The computer readable medium as in claim 23, wherein the physical interface is a UTOPIA.